



Newsletter of the

# Hawai'i Bromeliad Society

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AUGUST 2013

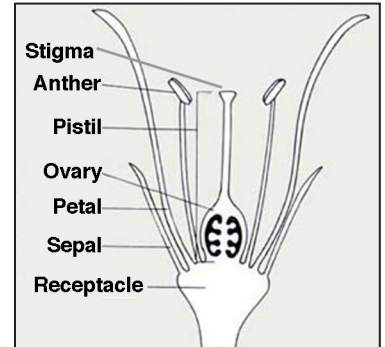
## HYBRIDIZING BROMELIADS

“Birds do it, bees do it, sometimes even Bromeliad growers . . .,” and thanks to Troy’s program at our July meeting, we now have much better “hands on” knowledge about Bromeliad reproduction, cross-pollination, and hybridizing. And with Bromeliads, too, it turns out that it’s helpful to know some basic anatomy. Bromeliad flowers have three sepals and three petals, surrounding six stamens and a pistil. The top part of the stamen is the anther, which is the male reproductive part of the plant; the top part of the pistil is the stigma, the female reproductive part, where the pollen is deposited. Although all bromeliads have these parts, they differ in size and ease of access depending on the genus. *Neoregelia* and *Vriesea*, for example, usually have bigger centers, making for easier cross-pollination.

Hybridizing involves taking the pollen from the anthers of one plant, called naturally enough the pollen plant, and depositing it on the stigma of another plant, which becomes the seed plant. One of the first things hybridizers need to do is to figure out the timing for cross-pollination. The flowers of many Bromeliads open in the early morning, making that the best time of day to hybridize. But even more difficult is timing the maturity of the plants, so that they are both in bloom at the same time. When the timing is not quite right, however, pollen can be stored in a refrigerator.

Once you’ve picked out the plants that you want to cross, you need to “emasculate” the seed plant by taking off all six anthers so the plant does not self-pollinate. This is easier to do when the anthers are new and sticky, so it is less likely that any self-pollinating pollen will fall off. You then take the pollen from the anthers of the “pollen” plant, and rub it on the stigma of the seed plant.

Next comes a vital part of the process: tagging the seed plant—noting the heritage of the pollen plant and the date of cross-pollination. Without good record-keeping about the parents and the hybridization process, even the most attractive plant would not be recognized by the Bromeliad community.



Note the hybridization tags!

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### 2013 OFFICERS OF THE HAWAII BROMELIAD SOCIETY

PRESIDENT		VICE PRESIDENT & PROGRAMS
Susan Andrade		Troy Oden
TREASURER	MEMBERSHIP	WEB MASTER
Tessie Labra	Raleigh Ferdun	Tom Stuart
CORRESPONDING SECRETARY		RECORDING SECRETARY
Marie Grininger		Stanley Schab
HOSPITALITY	LIBRARY	NEWSLETTER
Val Wong	Lynette Wageman	Terese Leber
	<a href="http://www.hawaiibromeliadsociety.org">www.hawaiibromeliadsociety.org</a>	

## AUGUST MEETING

This Saturday, August 31, we meet at  
**Lyon Arboretum**  
 at Noon.

Our hospitality hosts are  
**Karen G. (drinks) & Tessie (snacks).**

## REPORT OF THE MEETING OF JULY 27, 2013

Lyon Arboretum

ATTENDING: Susan Andrade, Betty Chang, Marie Ferdun, Raleigh Ferdun, Helen Friend, Sam Kagesa, Terese Leber, Ed Nishiyama, Troy Oden, Stan Schab, Lynette Wageman, and Hazel Wong. Guest: Larry McGraw

CONVENED: 12:10; ADJOURNED: 2:00

HOSPITALITY: Our Hospitality Hosts for August are Karen Gollera (drinks) and Tessie Labra (snacks).

BROMELIADS IN PARADISE: Here's an update on activity on the conference front.

CONFERENCE CHAIR REPORT: Lynette reported that she had talked with Bonnie Boutwell, BSI conference director, and that the next issue of the BSI journal, which will list the names and contact information for the Conference Committee chairs, is at the printers; the information will also be posted on the Bromeliad Society International web site, so that conference visitors and volunteers can seek information or offer services. Bonnie also noted that BSI is working on signing up the seminar speakers.

At Marie's request, Lynette confirmed that the BSI will provide each Plant Show winner with a plaque, which the HBS will complement with a second award.

VENDORS: Lynette reported that the solicitation letter to non-Hawai'i vendors is with Bonnie. Terese gave Marie business cards she had collected at the Hale'iwa Arts Festival from arts and crafts vendors, and noted that the Made in Hawai'i Festival in August would present a good opportunity to let other potential vendors know about the conference. Troy reported that the conference bags we have selected would cost about \$3.80 each, including delivery. Lynette noted that she had approached the Cookie Corner for information on favors for the conference banquet, and would contact the company's vice president for sales.

Lynette raised the possibility of seeking corporate sponsorship, specifically from Dole, and of establishing levels of sponsorship.

ALOHA BASKETS: The members approved a motion

**to set aside the May 2013 incentive plan for volunteers donating items for the baskets.**

The idea could be revisited as the committee budgets become clearer, if members decide such a plan is warranted. Because of legal problems with raffles, it was suggested that the baskets could be sold through silent auctions.

BUDGET COMMITTEE. At its next meeting, the committee (Marie, Raleigh, Troy, Sharon Peterson, and Lynette) will discuss how to divvy up the BSI conference seed money among the committees.

COMMITTEE REPORTS: Committee chairs will present status updates at the August meeting; Marie will send the chairs a report form for outlining goals, schedules, and budgets.

MOSQUITOES (IN BROMELIADS IN PARADISE): Lynette reported that she had called the Department of Health about the recent removal of bromeliads from the median strip of the freeway near Honolulu International Airport, heading towards town. The Department of Health maintains insect traps at the airport, and had found a dengue fever-bearing mosquito. As a consequence, the Department of Transportation removed the bromeliads, which had been planted as part of a beautification campaign leading up to the APEC conference in 2011. According to published reports, it cost \$12,000 to remove \$58,000-worth of plants (installation costs for the project totalled \$319,000). Lynette talked to an entomologist at the Department of Health, who told her that the Department of Transportation did not check the plants for mosquitoes. Lynette is preparing a critical letter to the editor, which she would send as an HBS member but not on behalf of the society. The members approved a motion

**that Lynette send the letter, and identify herself as an HBS member.**

Lynette also noted that members should not let their neighbors intimidate them about growing bromeliads, but could take the opportunity to inform them of the easy and proven ways of disrupting mosquitoes from breeding in bromeliads.

PROGRAM: Helen showed off an inexpensive pair of long gloves that she got from City Mill that are well-designed for bromeliad gardening.

Thank you to Ed for displaying his *Neoregelia*, and to Lynette, for pointing out how differences in blooming can be used to identify *Canistrum* and *Neoregelia*.



## HYBRIDIZING BROMELIADS

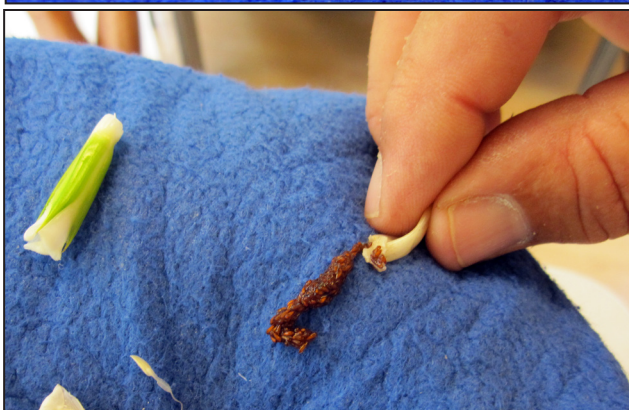
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Then you wait . . . and wait: the first waiting period of a very long process. Depending on the genus, it can take from two or three to nine months or more for the seed plant to produce a seed capsule. The hybridizer then needs to remove the capsule, wash the seeds (gently), and try to get them to germinate. Many growers place the seeds on a bed of damp coir (coconut fiber) or potting soil. Once the seeds germinate, which can take a week or two or even longer, they can be placed in small pots, which you get to tend for two or three years, until the plants are mature. It's at that point that you can start to pick the winners, and see if the hybridization succeeded in producing a beautiful new variety. Of course, even then it's another wait until the new hybrid starts producing pups, which is when hybrids usually start to be marketed.

Hybridization is clearly not just a long process, but one with a lot of room for disappointment or failure. The results are not always an improvement over the parent plants. You may be trying to cross a variety with good color with one with good form, but unfortunately, it's never certain which parent plant will most influence the hybrid, and genetic traits can even skip a generation or more. Your hybrid might resemble more closely its grandparents than its pollen and seed plants—another reason why good recordkeeping is essential.

Hybrids that result from crossing two members of the same species give birth to another member of that species—although maybe one with better variegation or color or form. Crossing two different species results in what's called an F1 hybrid. These plants should have consistent characteristics, reflecting a mixture of both parents. If one parent plant is a species and the other a hybrid, or if you are crossing two F1 hybrids, you will produce an F3 hybrid, which may have spectacular characteristics, but ones that aren't necessarily passed on to its own offspring, as may also be the case when crossing a species plant with a hybrid. As the number of ancestor plants increases, so does the chances for interesting hybrids showing different combinations of the characters of the parent and grandparent plants.

Mulford Foster, renowned Bromeliad explorer and grower, once said, "Hybridizing bromeliads is like changing an already beautiful plant into something exquisitely outstanding." He also said the process "may necessitate a little practice with a steady hand!"



*Neoregelia* 'Hannibal Lector'—a hybrid cultivar: seed parent, *punctatissima*; pollen parent, *carcharodon* 'Tiger'



## WINDY CITY TILLANDSIA



The 2013 issue of *The BSGC News*, produced by the Bromeliad Society of Greater Chicago has a really informative article on *Tillandsia* by Odeon Head, reprinted from the May 2007 *Houston Newsletter*, and several good hints and great photos by BSGC members on mounting and displaying *Tillandsia*. The “Chain of *Tillandsia*,” the “*Tillandsia* Jellyfish Mobile,” and the “Cute as a Button *Tillandsia*” are all created by BSGC member Anne Coughlan (see Lynette or Stan for a copy of the newsletter).

Join us at  
**California Pizza Kitchen**  
 for a flavorful FUNdraising event!

**Just bring in this flyer**, present it to your server, and **20%** of your check will be donated to our organization. Purchases include dine-in, take-out, catering and all beverages!

Fundraiser in support of  
**Friends of Lyon Arboretum**  
**Wednesday, Sept 11<sup>th</sup>, 2013**  
**(All Day)**

### California Pizza Kitchen

Kahala Mall • 4211 Waiialae Ave  
 (Across from Macy's)  
 808.737.9446

Go to [cpk.com](http://cpk.com) to view our pizzas, pastas, salads, appetizers & desserts. You can even order online!

Join the  
**CPK Adventure Club**  
 at [cpk.com](http://cpk.com) and receive  
**\$5 off your next visit!**



Eligible groups include non-profit schools and 501c organizations. Donation amount excludes proceeds from tax, gratuity, gift card and retail purchases. Valid for dine-in, take-out, online orders, catering or curbside service. Alcoholic beverages included. Not valid on delivery. Event proceeds void if flyers are distributed in or near the restaurant. Manager, please attach this flyer to the guest check.

The Friends of Lyon Arboretum are raising money to assist in supporting field trips to Lyon Arboretum by local schools. They are offering a discount coupon at California Pizza Kitchen in Kahala—only the Kahala store—on September 11, 2013. Bring the coupon to the Kahala CPK and 20 percent of the check will be donated to the Friends of Lyon Arboretum. The coupon is good either for in-store dining or take out. The coupon is also available on the Arboretum web site.

## MYSTERY PLANT IDENTIFIED

HBS received the following inquiry from a puzzled Bromeliad grower:

I have this vriesea? Alcanterea? In my yard. It is about 30” across and 18” tall. It is much blacker than the picture shows. The flower is fairly nondescript, but issues fluffy seeds(?) It has never had keiki form at the base or inside the leaves.

This is a complete mystery to me.

Can anyone tell me who this is?

From the photo and that meager description, our master gardener Tom Stuart was able to identify the plant as a *Werauhia*, possibly a *sanguinolenta*.

So, we now have an informed and happy grower (and maybe future HBS member!). Thank you, Tom.

